

## SEQUENCE LISTING

<110> FUCHS, Sara  
 BARCHAN, Dora  
 SOUROUJON, Miriam

<120> RECOMBINANT FRAGMENTS OF THE HUMAN ACETYLCHOLINE RECEPTOR AND THEIR USE FOR TREATMENT OF MYASTHENIA GRAVIS

<130> FUCHS=2A

<140> NOT YET ASSIGNED

<141> 2001-03-29

<150> 09/423,398

<151> 1999-11-08

<150> PCT/IL98/00211

<151> 1998-05-06

<160> 32

<170> PatentIn version 3.0

<210> 1

<211> 630

<212> DNA

<213> Homo sapiens

<400> 1

```
tccgaacatg agaccgtct ggtggcaaag ctatttaaag actacagcag cgtggtgcgg      60
ccagtggaag accaccgcca ggtcgtggag gtcaccgtgg gcctgcagct gatacagctc    120
atcaatgtgg atgaagtaaa tcagatcgtg acaaccaatg tgcgtctgaa acagcaatgg    180
gtggattaca acctaaaatg gaatccagat gactatggcg gtgtgaaaaa aattcacatt    240
ccttcagaaa agatctggcg ccagacctt gttctctata acgatgcaga tggtgacttt    300
gctattgtca agttcaccaa agtgctcctg cagtacactg gccacatcac gtggacacct    360
ccagccatct ttaaaagcta ctgtgagatc atcgtcaccc actttccctt tgatgaacag    420
aactgcagca tgaagctggg cacctggacc tacgacggct ctgtcgtggc catcaaccgg    480
gaaagcgacc agccagacct gagcaacttc atggagagcg gggagtgggt gatcaaggag    540
tcccggggct ggaagcactc cgtgacctat tctgtctgcc ccgacacccc ctacctggac    600
atcacctacc acttcgtcat gcagcgctg                                     630
```

<210> 2

<211> 210

<212> PRT

<213> Homo sapiens

<400> 2

```
Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser
1           5           10           15
```

Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr  
20 25 30

Ala Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp Glu Val Asn Gln  
35 40 45

Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gln Trp Val Asp Tyr Asn  
50 55 60

Leu Lys Trp Asn Pro Asp Asp Tyr Gly Gly Val Lys Lys Ile His Ile  
65 70 75 80

Pro Ser Glu Lys Ile Trp Arg Pro Asp Leu Val Leu Tyr Asn Asn Ala  
85 90 95

Asp Gly Asp Phe Ala Ile Val Lys Phe Thr Lys Val Leu Leu Gln Tyr  
100 105 110

Thr Gly His Ile Thr Trp Thr Pro Pro Ala Ile Phe Lys Ser Tyr Cys  
115 120 125

Glu Ile Ile Val Thr His Phe Pro Phe Asp Glu Gln Asn Cys Ser Met  
130 135 140

Lys Leu Gly Thr Trp Thr Tyr Asp Gly Ser Val Val Ala Ile Asn Pro  
145 150 155 160

Glu Ser Asp Gln Pro Asp Leu Ser Asn Phe Met Glu Ser Gly Glu Trp  
165 170 175

Val Ile Lys Glu Ser Arg Gly Trp Lys His Ser Val Thr Tyr Ser Cys  
180 185 190

Cys Pro Asp Thr Pro Tyr Leu Asp Ile Thr Tyr His Phe Val Met Gln  
195 200 205

Arg Leu  
210

<210> 3  
<211> 75  
<212> DNA  
<213> Homo sapiens

<400> 3  
ggtgacatgg tagatctgcc acgccccagc tgcgtgactt tgggagttcc tttgttttct 60

catctgcagg atgag 75

<210> 4  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 4

Gly Asp Met Val Asp Leu Pro Arg Pro Ser Cys Val Thr Leu Gly Val  
1 5 10 15

Pro Leu Phe Ser His Leu Gln Asp Glu  
20 25

<210> 5  
 <211> 705.  
 <212> DNA  
 <213> Homo sapiens

<400> 5  
 tccgaacatg agacccgtct ggtggcaaag ctatttaaag actacagcag cgtggtgcgg 60  
 ccagtggaag accaccgcca ggtcgtggag gtcaccgtgg gcctgcagct gatacagctc 120  
 atcaatgtgg atgaagtaaa tcagatcgtg acaaccaatg tgcgtctgaa acaggggtgac 180  
 atggtagatc tgccacgccc cagctgctg actttgggag ttctttgtt ttctcatctg 240  
 caggatgagc aatgggtgga ttacaaccta aaatggaatc cagatgacta tggcgggtgtg 300  
 aaaaaaattc acattccttc agaaaagatc tggcgcccag accttggttct ctataacgat 360  
 gcagatggtg actttgctat tgtcaagttc accaaagtgc tctgcagta cactggccac 420  
 atcacgtgga cacctccagc catctttaa agctactgtg agatcatcgt caccacttt 480  
 ccctttgatg aacagaactg cagcatgaag ctgggcacct ggacctacga cggctctgtc 540  
 gtggccatca acccggaag cgaccagcca gacctgagca acttcatgga gagcggggag 600  
 tgggtgatca aggagtcccg gggctggaag cactccgtga cctattcctg ctgccccgac 660  
 accccctacc tggacatcac ctaccacttc gtcatgcage gcctg 705

<210> 6  
 <211> 235  
 <212> PRT  
 <213> Homo sapiens

<400> 6  
 Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser  
 1 5 10 15  
 Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr  
 20 25 30  
 Ala Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp Glu Val Asn Gln  
 35 40 45  
 Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gly Asp Met Val Asp Leu  
 50 55 60  
 Pro Arg Pro Ser Cys Val Thr Leu Gly Val Pro Leu Phe Ser His Leu  
 65 70 75 80  
 Gln Asp Glu Gln Trp Val Asp Tyr Asn Leu Lys Trp Asn Pro Asp Asp  
 85 90 95  
 Tyr Gly Gly Val Lys Lys Ile His Ile Pro Ser Glu Lys Ile Trp Arg  
 100 105 110  
 Pro Asp Leu Val Leu Tyr Asn Asn Ala Asp Gly Asp Phe Ala Ile Val  
 115 120 125  
 Lys Phe Thr Lys Val Leu Leu Gln Tyr Thr Gly His Ile Thr Trp Thr

130	135	140
Pro Pro Ala Ile Phe Lys Ser Tyr Cys Glu Ile Ile Val Thr His Phe 145 150 155 160		
Pro Phe Asp Glu Gln Asn Cys Ser Met Lys Leu Gly Thr Trp Thr Tyr 165 170 175		
Asp Gly Ser Val Val Ala Ile Asn Pro Glu Ser Asp Gln Pro Asp Leu 180 185 190		
Ser Asn Phe Met Glu Ser Gly Glu Trp Val Ile Lys Glu Ser Arg Gly 195 200 205		
Trp Lys His Ser Val Thr Tyr Ser Cys Cys Pro Asp Thr Pro Tyr Leu 210 215 220		
Asp Ile Thr Tyr His Phe Val Met Gln Arg Leu 225 230 235		

<210> 7  
 <211> 690  
 <212> DNA  
 <213> Homo sapiens

<400> 7  
 tccgaacatg agaccctgtct ggtggcaaag ctattttaag actacagcag cgtggtgcgg 60  
 ccagtgggaag accaccgcca ggtcgtggag gtcaccgtgg gcctgcagct gatacagctc 120  
 atcaatgttg atgaagtaaa tcagatcgtg acaaccaatg tgcgtctgaa acaggggtgac 180  
 atggtagatc tgccacgccc cagctgcgtg actttgggag ttctttgtt ttctcatctg 240  
 caggatgagc aatgggtgga ttacaaccta aaatggaatc cagatgacta tggcgggtgtg 300  
 aaaaaaattc acattccttc agaaaagatc tggcgcccag accttggttct ctataacgat 360  
 gcagatggtg actttgctat tgtcaagttc accaaagtgc tctgcagta cactggccac 420  
 atcacgtgga cacctccagc catctttaa agctactgtg agatcatcgt caccactttt 480  
 ccctttgatg aacagaactg cagcatgaag ctgggcacct ggacctacga cggctctgtc 540  
 gtggccatca acccgaaag cgaccagcca gacctgagca acttcatgga gagcggggag 600  
 tgggtgatca aggagtccc gggctggaag cactccgtga cctattcctg ctgccccgac 660  
 acccctacc tggacatcac ctaccacttc 690

<210> 8  
 <211> 230  
 <212> PRT  
 <213> Homo sapiens

<400> 8

Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser 1 5 10 15
Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr 20 25 30

```
<210> 11
<211> 26
<212> DNA
<213> Artificial synthetic
```

<400> 11		
cggaattctg gaggtgtcca cgtgat		26
<210> 12		
<211> 23		
<212> DNA		
<213> Artificial synthetic		
<400> 12		
ccggatccgc catctttaaa agc		23
<210> 13		
<211> 25		
<212> DNA		
<213> Artificial synthetic		
<400> 13		
ggccatgggc tccgaacatg agacc		25
<210> 14		
<211> 29		
<212> DNA		
<213> Artificial synthetic		
<400> 14		
ccggatcctc aaaagtgrta ggtgatrtc		29
<210> 15		
<211> 24		
<212> DNA		
<213> Artificial synthetic		
<400> 15		
cgctatgggg ctgcttggtg acag		24
<210> 16		
<211> 24		
<212> DNA		
<213> Artificial synthetic		
<400> 16		
gacggtatca gtggtctcag tggc		24
<210> 17		
<211> 26		
<212> DNA		
<213> Artificial synthetic		
<400> 17		
cagcccagtg gaacagggag attcgc		26
<210> 18		
<211> 20		
<212> DNA		
<213> Artificial synthetic		

<400> 18  
gatcctcaaa ttgcagcaca 20

<210> 19  
<211> 20  
<212> DNA  
<213> Artificial synthetic

<400> 19  
agccaaaaga tgagaagcca 20

<210> 20  
<211> 24  
<212> DNA  
<213> Artificial synthetic

<400> 20  
tgggagacag ctgacggtta aaag 24

<210> 21  
<211> 20  
<212> DNA  
<213> Artificial synthetic

<400> 21  
cggggaatggg aattttacct 20

<210> 22  
<211> 20  
<212> DNA  
<213> Artificial synthetic

<400> 22  
tccagagcag tgatggtgag 20

<210> 23  
<211> 24  
<212> DNA  
<213> Artificial synthetic

<400> 23  
aacatgacac cgcggagact cggg 24

<210> 24  
<211> 20  
<212> DNA  
<213> Artificial synthetic

<400> 24  
aggacttggc cttttggagt 20

<210> 25  
<211> 20  
<212> DNA  
<213> Artificial synthetic

<400> 25  
 cagtccttgg atggtgaggt 20

<210> 26  
 <211> 24  
 <212> DNA  
 <213> Artificial synthetic

<400> 26  
 tgatgaggtc cgggtgacgg tgct 24

<210> 27  
 <211> 21  
 <212> DNA  
 <213> Artificial synthetic

<400> 27  
 gtgagagaaa aggcattgct g 21

<210> 28  
 <211> 21  
 <212> DNA  
 <213> Artificial synthetic

<400> 28  
 ggttcttggt tggtttctctg c 21

<210> 29  
 <211> 24  
 <212> DNA  
 <213> Artificial synthetic

<400> 29  
 ggtgctctct gtcctctccg gggt 24

<210> 30  
 <211> 23  
 <212> DNA  
 <213> Artificial synthetic


<400> 30  
 gaggcaagct tacttcaata gca 23

<210> 31  
 <211> 23  
 <212> DNA  
 <213> Artificial synthetic

<400> 31  
 atgccagtgt ttcttggttc att 23

<210> 32  
 <211> 24  
 <212> DNA  
 <213> Artificial synthetic





DATE	DESCRIPTION	AMOUNT	BALANCE
1900	Jan 1		100.00
	Feb 1	50.00	150.00
	Mar 1	25.00	175.00
	Apr 1	75.00	250.00
	May 1	100.00	350.00
	Jun 1	150.00	500.00
	Jul 1	200.00	700.00
	Aug 1	250.00	950.00
	Sep 1	300.00	1250.00
	Oct 1	350.00	1600.00
	Nov 1	400.00	2000.00
	Dec 1	450.00	2450.00
1901	Jan 1	500.00	2950.00
	Feb 1	550.00	3500.00
	Mar 1	600.00	4100.00
	Apr 1	650.00	4750.00
	May 1	700.00	5450.00
	Jun 1	750.00	6200.00
	Jul 1	800.00	7000.00
	Aug 1	850.00	7850.00
	Sep 1	900.00	8750.00
	Oct 1	950.00	9700.00
	Nov 1	1000.00	10700.00
	Dec 1	1050.00	11750.00
1902	Jan 1	1100.00	12850.00
	Feb 1	1150.00	14000.00
	Mar 1	1200.00	15200.00
	Apr 1	1250.00	16450.00
	May 1	1300.00	17750.00
	Jun 1	1350.00	19100.00
	Jul 1	1400.00	20500.00
	Aug 1	1450.00	21950.00
	Sep 1	1500.00	23450.00
	Oct 1	1550.00	25000.00
	Nov 1	1600.00	26600.00
	Dec 1	1650.00	28250.00
1903	Jan 1	1700.00	29950.00
	Feb 1	1750.00	31700.00
	Mar 1	1800.00	33500.00
	Apr 1	1850.00	35350.00
	May 1	1900.00	37250.00
	Jun 1	1950.00	39200.00
	Jul 1	2000.00	41200.00
	Aug 1	2050.00	43250.00
	Sep 1	2100.00	45350.00
	Oct 1	2150.00	47500.00
	Nov 1	2200.00	49700.00
	Dec 1	2250.00	51950.00
1904	Jan 1	2300.00	54250.00
	Feb 1	2350.00	56600.00
	Mar 1	2400.00	59000.00
	Apr 1	2450.00	61450.00
	May 1	2500.00	63950.00
	Jun 1	2550.00	66500.00
	Jul 1	2600.00	69100.00
	Aug 1	2650.00	71750.00
	Sep 1	2700.00	74450.00
	Oct 1	2750.00	77200.00
	Nov 1	2800.00	80000.00
	Dec 1	2850.00	82850.00
1905	Jan 1	2900.00	85750.00
	Feb 1	2950.00	88700.00
	Mar 1	3000.00	91700.00
	Apr 1	3050.00	94750.00
	May 1	3100.00	97850.00
	Jun 1	3150.00	101000.00
	Jul 1	3200.00	104200.00
	Aug 1	3250.00	107450.00
	Sep 1	3300.00	110750.00
	Oct 1	3350.00	114100.00
	Nov 1	3400.00	117500.00
	Dec 1	3450.00	120950.00
1906	Jan 1	3500.00	124450.00
	Feb 1	3550.00	128000.00
	Mar 1	3600.00	131600.00
	Apr 1	3650.00	135250.00
	May 1	3700.00	138950.00
	Jun 1	3750.00	142700.00
	Jul 1	3800.00	146500.00
	Aug 1	3850.00	150350.00
	Sep 1	3900.00	154250.00
	Oct 1	3950.00	158200.00
	Nov 1	4000.00	162200.00
	Dec 1	4050.00	166250.00
1907	Jan 1</		